



Interregional Training Course on Preparation of a Feasibility Study for a New SMR Project

Hosted by

The Government of the Russian Federation

through the

State Atomic Energy Corporation 'Rosatom'

Vladivostok, Russian Federation

28 July to 1 August 2025

Ref. No.: TN-INT2023-2500472

Information Sheet

Purpose

The purpose of the event is to train the participants on the preparation of a feasibility study to support the owner/operator decision-making process for a new SMR project by defining the framework and business case for successful project implementation and addressing the possible approaches to implement the SMR construction project.

Working Language

The training course will be conducted in English.

Deadline for Nominations

Nominations received after **28 April 2025** will not be considered.

Project Background

Small Modular Reactors (SMRs) are advanced nuclear reactors designed to generate electric power typically up to 300 MWe, whose structures, systems and components can be fabricated in factories and transported to installation sites based on demand. Modularization enables the economics of serial production, shorter construction schedules, and lower capital cost. The purpose of the project is to provide broad support to Member States in the deployment of SMRs and Microreactors (MRs). The INT2023 TC project (**Supporting Member States' Capacity Building on Small Modular Reactors and Micro-reactors and their Technology and Applications as a Contribution of Nuclear Power to the Mitigation of Climate Change**) provides a forum to enable effective capacity building through training and technology transfer activities on all aspects of SMR and MR development, including siting, design, technology, engineering, construction, commissioning, operation, maintenance, human resource management, fuel cycle, waste management, decommissioning, economics, financing, nuclear safety and security, emergency preparedness and response arrangements, and legal framework.

The aim of the project is to enable national stakeholders to understand key characteristics of SMR and MR technologies and their applications, and to formulate, in line with international safety standards, countries' specific legal and regulatory frameworks, and generic user requirements and criteria. Member States are receiving technical assistance to evaluate the contribution of SMRs, MRs and their potential non-electric applications in addressing UN Sustainable Development Goals (SDGs) 6, 7, 9, 12 and 13, mitigating climate changes and integrating the basic principles of circular economy.

This training course is a part of the aforementioned INT2/0/23 project. Once a country's nuclear programme advances to Phase 2 of the Milestones in the Development of a National Infrastructure for Nuclear Power, as outlined in the IAEA Nuclear Energy Series No. NG-G-3.1 (Rev. 2), it is expected that the project owner or a project management organization will develop a feasibility study. This study defines the framework and business case for successful project implementation, establishes the basis for the final investment decision by the project owner, and strengthens stakeholder support. Additionally, the feasibility study provides inputs for the development of the bid invitation specification or technical specifications that the owner/operator issues to the vendor. Developing the feasibility study is a critical process to be completed during Phase 2 of the Milestones Approach. This course focuses on the arrangements for creating a project-specific feasibility study by the owner/operator or the project management organization.

Scope and Nature

After elaborating on the place of the feasibility study within the three phases of the Milestone Approach and on the arrangements for the development of the project-specific feasibility study for a NPP, the event will provide technical guidance on topical areas followed by suggestions as to the content and specific issues to be considered while performing the evaluation on each topic.

The training course will mainly consist of a series of presentations delivered by IAEA staff, international experts, and experts from the Russian Federation. The programme of the course may include discussions, peer-to-peer exchange of good practices, working group sessions on related topical issues, and a technical tour to a nuclear facility.

In addition, the training course will provide opportunities for participants to network and continue sharing information and good practices as well as other potential follow-up tasks and coordinated activities, as appropriate.

Expected outputs

The training course aims to ensure that decision-makers from the Nuclear Energy Programme Implementation Organization (NEPIO), Owner/Operators, and Government understand the objectives, scope, process, and management of the feasibility study. This understanding is crucial for identifying the possible approaches to implement the NPP construction project, for preparing the basis for the final investment decision, and for providing inputs to the bid invitation or technical specifications for vendors, depending on the country's chosen approach.

The following items are the subject of the training course:

- Objectives and arrangements for the development of the project-specific feasibility study for a new nuclear power plant project;
- Roles of the owner/operator in assembling a feasibility study; and
- Contents of a feasibility study for a new nuclear power plant project.

Participation

The event is open to up to 25 participants from the following Member States (newcomers' countries) participating in the TC Project INT/2/023:

Algeria, Argentina, Armenia, Bolivia, Brazil, Bulgaria, China, Czech Republic, Egypt, El Salvador, Estonia, Ethiopia, Ghana, Guatemala, Hungary, Indonesia, Islamic Republic of Iran, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lithuania, Malaysia, Mexico, Mongolia, Morocco, Myanmar, Nigeria, Pakistan, Philippines, Poland, Romania, Rwanda, Saudi Arabia, Serbia, Singapore, Slovakia, South Africa, Sri Lanka, Thailand, Tunisia, Türkiye, United Republic of Tanzania, Uzbekistan, Zambia. The selected participants to attend will be funded through INT2/0/23.

In addition to the above, 5 participants are from: Belgium, Canada, Denmark, Finland, France, Italy, Japan, Republic of Korea, Russian Federation, Spain, United Kingdom, United States of America. The participants to attend will be cost free to IAEA.

Participants' Qualification and Experience

The training course is designed for professionals from expanding and newcomer countries. Applicants should be from owner/operating organizations or project management organisations or from other relevant institutions involved in the preparation of the feasibility study of SMRs.

The activities will be conducted in English and candidates should have sufficient English proficiency to participate in the event without difficulty.

Candidates who previously attended this similar course will not be accepted to participate more than once to give the opportunity for new candidates to gain the knowledge of the course. This will enhance the capacity building of multiple staff in the organization.

Participants are encouraged to become familiar with the following IAEA publications:

- INTERNATIONAL ATOMIC ENERGY AGENCY, Milestones in the Development of a National Infrastructure for Nuclear Power, Nuclear Energy Series No. NG-G-3.1 (Rev. 2), IAEA, Vienna (2024).

- INTERNATIONAL ATOMIC ENERGY AGENCY, Preparation of a Feasibility Study for New Nuclear Power Projects, IAEA Nuclear Energy Series No. NG-T-3.3, IAEA, Vienna (2014)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Management of Nuclear Power Plant Projects, IAEA Nuclear Energy Series No. NG-T-1.6, IAEA, Vienna (2020)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Invitation and Evaluation of Bids for Nuclear Power Plants, IAEA Nuclear Energy Series No. NG-T-3.9, IAEA, Vienna (2011)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Initiating Nuclear Power Programmes: Responsibilities and Capabilities of Owners and Operators, IAEA Nuclear Energy Series No. NG-T-3.1 (Rev. 1), IAEA, Vienna (2020)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Contracting and Ownership Approaches for New Nuclear Power Plants, IAEA-TECDOC-1750/Rev. 1, IAEA, Vienna (2024)

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Search for the relevant technical cooperation event (EVT2500472) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e., the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline. **All nominations must include a scan of the candidate's first page of passport with photo.**

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Training on Basic Security in the Field (BSITF)

In order to comply with UN system-wide security measures, it is required that all training course participants complete the online security awareness training BSAFE (which replaces BSITF and ASITF), prior to traveling to locations where UN security phases are in effect. The aim of these course is to educate participants on how best to avoid or minimize potential dangers and threats, and to demonstrate what individuals can do if they find themselves in insecure situations. The course is available online (<https://training.dss.un.org/course/category/6>).

Once an individual has completed the training, he/she must go back to the main training page to receive the certificate. If the button to get the certificate is not immediately visible, please refresh the page. BSAFE is maintained by UNDSS; in case of problems with the system, please contact UNDSS through the "Contact Us" page on the training website (<https://dss.un.org/dssweb/contactus.aspx>).

This certificate is compulsory for any IAEA-supported activity and should be submitted, along with the Nomination Form, through the competent authority in your country (NLO). Copies of the certificate should be kept by the candidate for his/her records as the BSAFE certificate does not expire.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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